

## Functional Equivalence Analysis of Requirements for Recyclable Materials: US EPA vs. MA DEP – Attachment A

Material/Waste	Federal Cite	Regulatory status under EPA	DEP Cite	Regulatory status under MA DEP
Sludges exhibiting a characteristic of HW	See table at 261.2(c)	<b>Exempt</b> unless material used in a manner constituting disposal; burned for energy recovery; or accumulated speculatively	30.212(5)	<b>DEP more protective.</b> “Characteristic sludge being reclaimed” regulated as Class A Regulated Recyclable Material (RRM). <sup>1</sup>
By-product exhibiting HW characteristic	See table at 261.2(c)	<b>Exempt</b> unless material used in a manner constituting disposal; burned for energy recovery; or accumulated speculatively	30.212(6)	<b>DEP more protective.</b> “Characteristic by-product being reclaimed” regulated as a Class A RRM. <sup>2</sup>
Commercial chemical products listed in 261.33	See table at 261.2(c)	<b>Exempt</b> unless material used in manner constituting disposal or burned for energy recovery. EPA also exempts CCPs when burned for energy recovery if consistent with ordinary use.	30.212(7)	<b>DEP more protective.</b> “Commercial chemical products listed in 30.133 or 30.136” regulated as a Class A RRM. <sup>2</sup>
Materials not solid wastes when recycled	261.2(e)(1)(i), (ii), (iii)	<b>Exempt</b> when recycled. “Recycled” if used/reused as ingredient in an industrial process or as effective substitute for commercial products or if returned to original process as substitute for feedstock	30.212(1)(a)-(c)	<b>DEP more protective.</b> “Material used/reused as ingredient; used/reused as substitute for commercial chemical prod.; or returned as substitute for feedstock” regulated as Class A RRM. <sup>2</sup>
Secondary materials reclaimed and returned to original process (hard-piped)	261.4(a)(8)(i)-(iv)	<b>Excluded</b> provided only tank storage involved; entire process is closed by being entirely connected with pipes; accumulation prior to recycling does not exceed 12 months; and reclaimed material not used to produce fuel or used to produce product that is used in a manner constituting disposal. See also federal status exclusion at 261.5(c)3 <sup>2</sup> and variance provision at 260.30 and 260.31 <sup>3</sup> . EPA’s authority to regulate material destined for recycling based upon how it is accumulated was challenged in ABR.	30.212(10)	<b>EPA argues DEP is less protective</b> than 261.4(a)(8) because materials can be accumulated in containers prior to recycling <u>and</u> deducted from status.
Industrial Ethyl Alcohol – Reclaimed	261.6(a)(3)(i)	<b>Exempt</b> from requirements for generators, transporters and storage facilities (262-266, 268, 270) or notification requirements	30.212(2)	<b>DEP more protective.</b> “Industrial ethyl alcohol” regulated as Class A RRM. <sup>2</sup>
Scrap metal	261.6(a)(3)(ii)	<b>Exempt</b> from requirements for generators, transporters and storage facilities (262-266, 268, 270) or notification requirements	30.212(3)	<b>DEP more protective.</b> “Scrap metal” regulated as Class A RRM. <sup>2</sup>
Characteristic used oil/Mixtures of used oil and ignitable HW that is no longer characteristic	261.6(a)(4) and 279.10(b)(2)	<b>Exempt</b> from requirements of parts 260 through 268, but regulated under part 279; allows mixing of waste oil and characteristic ignitable hazardous waste; and allows resultant mixture to be sent to a solid waste disposal facility if resultant mixture does not exhibit a characteristic	30.212(8)	<b>DEP more protective.</b> “Off-spec waste oil that has the characteristics of HW that is not a HW fuel” regulated as Class A RRM. <sup>2</sup>
Specification used oil fuel	279.10(b)	<b>Exempt</b> from requirements of parts 260-268, but is regulated under part 279; allows waste oil to be sent to a solid waste disposal facility	30.212(9)	<b>DEP more protective.</b> “Spec used oil fuel burned for energy recovery” regulated as Class A RRM. <sup>2</sup>
Special requirements for HW generated by CESQGs	261.5	<b>Conditional exemption</b> for HW generated by CESQGs; allows disposal of HW and acute HW (<1kg) at solid waste facilities	30.353	<b>DEP more protective.</b> VSQG waste must be disposed of at HW facility; VSQGs cannot generate any acutely HW.

<sup>1</sup> Class A RRM’s are subject to requirements for recordkeeping, tracking, annual reporting, speculative accumulation (prohibition), personnel training, emergency prevention and response, and accumulation in tanks and containers.

<sup>2</sup> EPA excludes from status calculations secondary materials recycled without prior accumulation in any on-site process, including stand-alone units enclosed regardless of whether the unit is completely enclosed or where the reclaimed material is used.

<sup>3</sup> 260.30 and 260.31 allow a variance from classification as a solid waste for materials that are accumulated prior to being reclaimed in an on-site or off-site unit that need not be completely enclosed where such materials are reused within the original primary production process.

### Explanation of Functional Equivalence Matrix

The following matrix compares the different regulatory requirements of the US EPA (EPA) and Massachusetts DEP (DEP) for recyclable materials. This analysis supports DEP's argument that the overall stringency of its recycling program more than offsets a provision in the Massachusetts recycling regulations which EPA has deemed less stringent.

While 310 CMR 30.221(4) has been identified by EPA as being "less stringent," it is more than made up for by the overall scope of DEP's hazardous waste recycling program. Since 1986, DEP has administered a permitting program for materials that are generally exempt from federal regulations [see 310 CMR 30.212(1)-(10)]<sup>3</sup>. In 1999, 1,461 permittees were registered with the Department, including 951 for used oil, 175 for solvents and 85 for lead scrap/solder dross. During that same time period 493,000 tons of materials were recycled. Of that total, only 15,000 tons (3%) were subject to federal regulation.<sup>3</sup> The remaining (federally exempt) materials are subject to DEP's state-only requirements that include recordkeeping, tracking, annual reporting, speculative accumulation (prohibition), personnel training, emergency prevention and response, and tanks and containers. These requirements all go beyond what is required by EPA.

In addition, Massachusetts is more stringent with respect to how it regulates small businesses (Very Small Quantity Generators). The federal analog to MA DEP's VSQG program allows "Conditionally Exempt Small Quantity Generators" (CESQGs) to dispose up to half a drum of hazardous waste and a smaller amount of acutely hazardous waste monthly into solid waste landfills. Massachusetts prohibits this practice.

If EPA's standard for authorization approval is whether an overall state program protects the environment at least as stringently as the federal program, then this matrix clearly demonstrates that the Massachusetts program is functionally equivalent.